

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended) A method of synthesizing a first sound signal based on a second sound signal, the first sound signal having a required first fundamental frequency and the second sound signal having a second fundamental frequency, the method comprising the steps of:

- determining required pitch bell locations in the time domain of the first sound signal, the pitch bell locations being distanced by one period of the first fundamental frequency,
- providing a plurality of pitch bells by windowing the second sound signal based on pitch bell locations in the time domain of the second sound signal, the pitch bell locations of the second sound signal being distanced by one period of the second fundamental frequency, said windowing being determined based on a

type of said second sound signal;

- randomly selecting one of ~~a~~-said pitch bells from the provided pitch bells for each of the required pitch bell locations, said selection being uniformly distributed among said number of provided pitch bells; and

- performing an overlap and add operation on the selected pitch bells for synthesizing the first signal.

2.(Currently Amended) The method of claim 1, ~~whereby-wherein~~ the second sound signal is a hybrid sound comprising a noisy and periodic component.

3.(Currently Amended) The method of ~~claims-1~~ claim 1, wherein the second sound signal ~~being-comprises~~ a voiced fricative sound signal.

4.(Currently Amended) The method of claim 1, wherein the second sound signal ~~being-comprises~~ a voiced sound signal and ~~whereby-wherein~~ a raised cosine is used for windowing of the second sound signal.

5. (Currently Amended) The method of claim 1, wherein the second sound signal ~~being~~ comprises an unvoiced sound signal and ~~whereby~~ wherein a sine window is used for windowing of the second sound signal.

6. (Currently Amended) The method of claim 1, wherein the second sound signal ~~having~~ has spectrally alike periods, the spectrally alike periods having basically the same information content.

7. (Currently Amended) The method of claim 1, wherein the required first fundamental frequency and the second fundamental frequency ~~being~~ are substantially the same.

Claim 8 (Canceled)

9. (Previously Presented) A computer system, in particular text-to-speech synthesis system, for synthesizing a first sound signal based on a second sound signal, the first sound signal

having a required first fundamental frequency and the second sound signal having a second fundamental frequency, the computer system comprising:

- means for determining required pitch bell locations in the time domain of the first sound signal, the pitch bell locations being distanced by one period of the first fundamental frequency,

- means for providing a plurality of pitch bells by windowing the second sound signal based on pitch bell locations in the time domain of the second sound signal, the pitch bell locations of the second sound signal being distanced by one period of the second fundamental frequency, said windowing being determined based on a type of said second signal,

- means for randomly selecting one of a said pitch bells from the provided pitch bells for each of the required pitch bell locations, said selection being uniformly distributed among said number of provided pitch bells; and

- means for performing an overlap and add operation on the selected pitch bells for synthesizing the first signal.

10. (Previously Presented) The computer system of claim 9

further comprising:

means for storing of sound classification data, the means for storing of sound classification data being adapted to store data being indicative of an interval containing the second sound signal within an original sound signal.

11. (Previously Presented) A method for construction a synthesizing signal comprising:

determining a plurality of pitch bell locations within an original sound signal, said locations being distanced by one period of a fundamental frequency;

determining a plurality of pitch bells associated with each of said pitch bell locations, said pitch bells being determined by windowing said original sound signal, said windowing being determined based on a type of said original signal;

determining a plurality of pitch bell locations within a signal to be synthesized, said locations being distanced by one period of a frequency associated with said synthesized signal;

randomly selecting for each of a plurality of pitch bell locations within said synthesized signal one of said pitch bells

associated with said original signal; and

overlapping and adding said selected of pitch bells at said synthesized signal pitch bell locations.

12.(New) A device for synthesizing a first sound signal based on a second sound signal, the device comprising:

a first module configured to determine required pitch bell locations of the first sound signal;

a windowing module configured to provide a plurality of pitch bells by windowing the second sound signal based on pitch bell locations of the second sound signal, said windowing being determined based on a type of said second signal,

a selector configured to randomly select one of said pitch bells from the provided pitch bells for each of the required pitch bell locations, said selection being uniformly distributed among said number of provided pitch bells; and

an adder configured to overlap and add the selected pitch bells for synthesizing the first signal.

13.(New) The device of claim 12, wherein the pitch bell

locations of the first sound signal are distanced by one period of a first fundamental frequency of the first sound signal, and the pitch bell locations of the second sound signal are distanced by one period of a second fundamental frequency of the second sound signal.

14.(New) The device of claim 12, wherein the required pitch bell locations are in a time domain of the first sound signal.

15.(New) The device of claim 12, wherein the windowing is based on the pitch bell locations in a time domain of the second sound signal.

16.(New) The device of claim 12, further comprising a module configured for storing of sound classification data indicative of an interval containing the second sound signal within an original sound signal.